

Oral Hygiene



MAY, 1938

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Practicing Dentists

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The sprue former (with one or more wax patterns mounted on it), flask and investment funnel are assembled and placed in the basket of the machine. Investment is poured into the funnel.

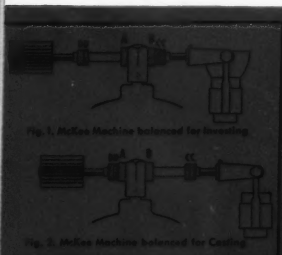
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CASTING

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Oral Hygiene

MAY
1938

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Inside the **ZOLLER CLINIC**

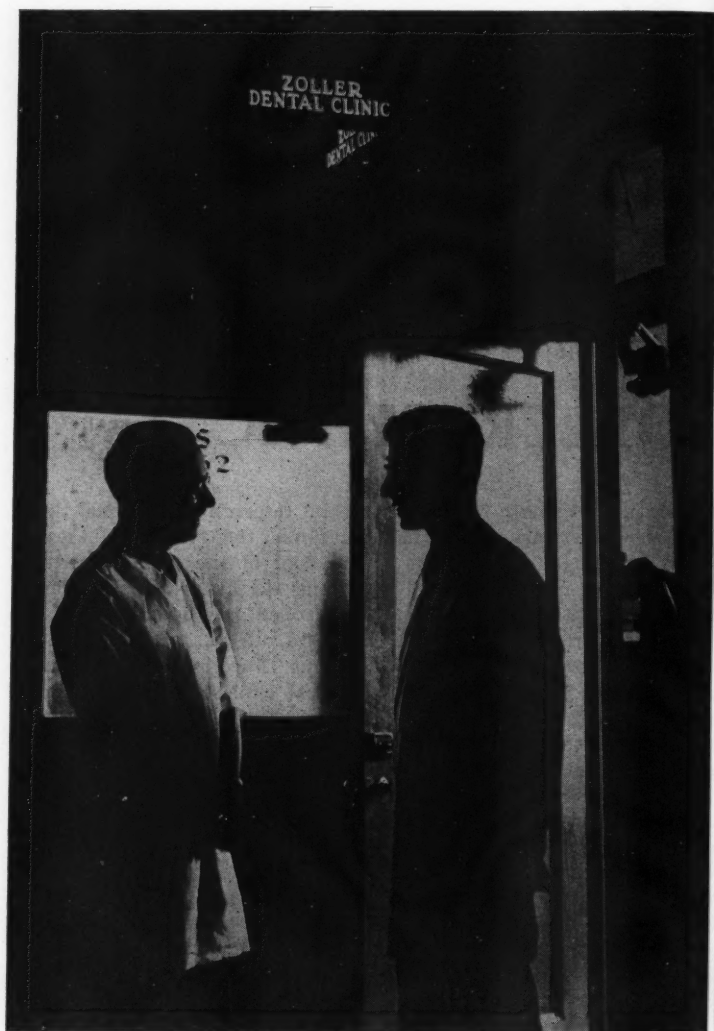
FIVE YEARS AGO the late Walter G. Zoller, deeply concerned over the dental problems of the indigent, made a gift of nearly three million dollars to the University of Chicago for free dental service and research.¹ None of this money was to be used for buildings. The entire income from the fund was to be devoted to giving the indigent better dental service.

Since December, 1936, Mr. Zoller's expressed wish has been taking definite form on the University campus. Under the competent direction of Doctor James Roy Blayney, the Walter G. Zoller Memorial Dental Clinic has been established as a center of experimentation and original research to integrate the dental problem in the entire physical picture. Because of the character

of the research to be done, the location of the Clinic, on the second floor of the Albert Merritt Billings Hospital, is ideal. It can be reached only by entering the hospital and passing down a long corridor lined with important medical clinics. Physically connected with the hospital are the Bobs Roberts Memorial Hospital for Children and the Max Epstein Clinic. Two other hospitals, the Home for Destitute Crippled Children and the Chicago Lying-in Hospital complete the University quadrangle in which the new dental Clinic is situated.

Inside the bright, modernly equipped treatment room of the Zoller Clinic, one is immediately impressed by the pleasant, friendly relationship that exists between the staff and the patients. Here there is no waiting line, no tension, none of the rush and irri-

¹Three Million Dollars for Dentistry, ORAL HYGIENE 26:1023 (August) 1936.



Entrance to Zoller Dental Clinic in a corridor of the Albert Merritt Billings Hospital. J. R. Blayney, Director, and S. F. Bradel.

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tation found in the usual clinic. Patients are treated by appointment only. There is a definite interest in the individual problem, an emphasis on quality rather than volume.

The cordial atmosphere of this Clinic is no accident. It is the natural outgrowth of a policy that has been followed by the staff since the Clinic opened. There is a constant effort to build up the morale of the patient, to make him feel that he has something worth while to offer the Clinic, that he is not a charity case. To each patient Doctor Blayney recalls the system of barter used in the development of this country. He explains that his staff is willing to give the highest type of service possible but from the patient some contribution is expected in return—his cooperation. He must agree to return for treatment as frequently as he is wanted and over as long a period of time. To this suggestion every patient reacts favorably.

Motivating Factors

In all their work Doctor Blayney and his associates keep these three motivating factors constantly in mind. The Clinic was established to:

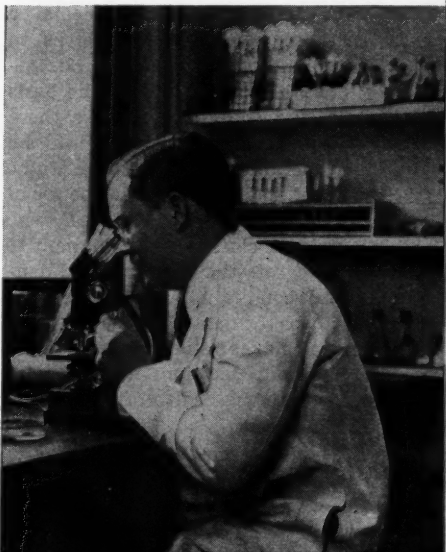
1. Provide free dental service of the best possible quality for the indigent patient.
2. Offer an opportunity for advanced study in the biological sciences and clinical procedures for the recent dental graduate.
3. Promote research with the dental motivation in the various

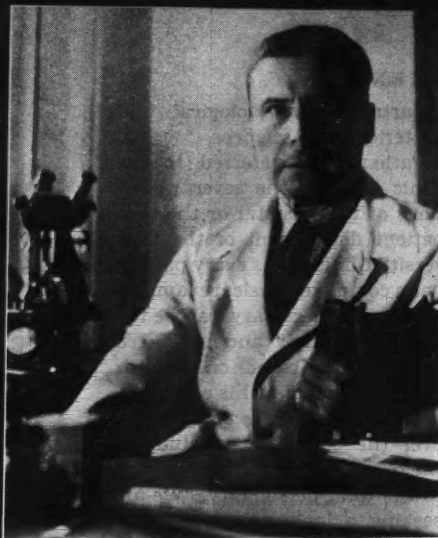
departments of biological and bacteriological sciences.

Patients are referred to the clinic through the several divisions of the hospital or the outpatient department of the University Clinic. Thus every patient has a complete physical examination and, if necessary, can be the subject of study and prolonged investigation based on a clear biologic concept of his condition.

Doctor Blayney is enthusiastic over the possibility of studying the dental problem in its relation to the total personality. "We are seeking a longitudinal study of our patients rather than a cross section," he said. "That is why we want patients to come through the clinics of the hospitals. We then have at our command all the knowledge and skill of the staff members of the various medical

R. Wendell Harrison, Ph.D., bacteriological laboratory.





Friedrich Wasserman, M. D., anatomical laboratory.

clinics. This information is invaluable to us in our investigation of many dental problems."

In the Zoller Clinic there are facilities and a staff prepared to give all classes of dental service, but effort is now being concentrated on unusual problems or those that lend themselves to original study and research. Patients are accepted on the basis of indigency and because there is a condition that will fit into the general program of clinical study. Each one is referred to the social service worker of the staff, who tries in classifying the patient to integrate the economic and dental condition. At all times she keeps the dental problem in mind and makes a study of the environmental conditions in their relation to the health of the patient

and the possible success of the treatments to be given.

Doctor Blayney sees the Zoller Clinic, not as a local project, the benefits of which are to be restricted to any one city or state; his ambition is to make it fulfill the hopes of Mr. Zoller—that his gift would bring the greatest good to the largest number of persons. To achieve this objective the Zoller Clinic is being made a training ground for dental teachers—men who will go out as dental missionaries to become staff members of other universities and enter private practice in many sections of the country. What Doctor Blayney is attempting, is to teach dentists to be biologically minded and see the patient as a total personality, not merely be concerned with the condition of his teeth. He is trying to bridge a gap in current education, to make each student grasp the thought that the clinic is not separate from the laboratory science he studied in his pre-clinical years but that it is the big laboratory where all his previous training is used in the treatment of his patient.

To men who have superior academic records and are recommended by the deans of the schools from which they were graduated, the Zoller Clinic offers an opportunity to serve as internes. The internship is for one year and for its duration the interne lives in the hospital where he has abundant opportunity to become acquainted with medical internes and learn their point of

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view. He is also in a position to broaden their concept of dentistry.

Fellowships lasting from three to five years and carrying a liberal stipend and free tuition for courses in the biological division are available for men who have shown special ability or originality in the study of dental problems. Candidates who have completed an internship or served on the staff of a recognized dental or medical school are usually given preference in making these appointments. With this fellowship plan it is possible to permit an ambitious young man to continue his education without any financial drain and to gain experience on the teaching staff and in the practical work. He is required to spend only about fifty per cent of his time in the clinic and may devote as much of the remainder of his time as he wishes to the study of special cases and original research.

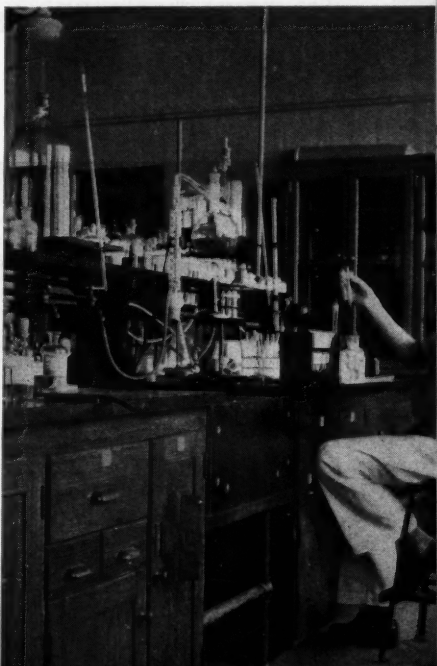
The Zoller Foundation is also developing research laboratories in the several branches of science where dental problems may be thoroughly examined. To date biochemical, anatomical, and bacteriological laboratories have been established. The Clinic has been successful in obtaining outstanding men in each field to conduct these studies, and it is the hope of Doctor Blayney that both the dental profession and society will benefit from this fortunate circumstance.

On certain days each week seminars, which staff members

may attend, are held in the departments of physiology, anatomy, bacteriology, medicine, surgery, and pathology. To further original research each person on the staff is encouraged to select a problem for study in which he has some special interest. In addition to these there are several main projects always under consideration by the Zoller Clinic.

Using biochemistry and bacteriology as a background, the nature and treatment of dental caries during the whole life span is now being studied, with particular attention being given to a special project on the relationship between dental caries and

John Muntz at work in a corner of the biochemical laboratory.



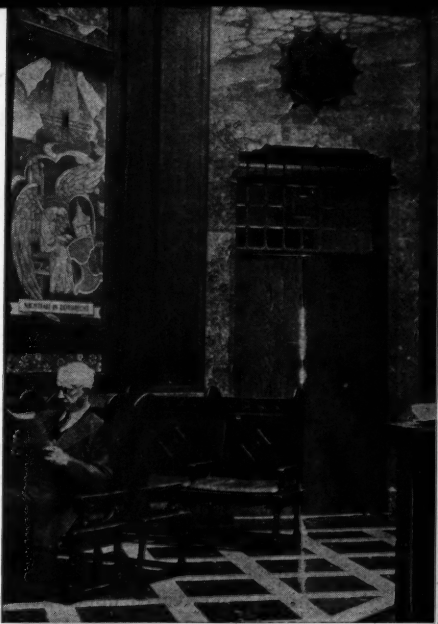


**Main entrance to Al-
bert Merritt Billings
Hospital, University of
Chicago campus.**

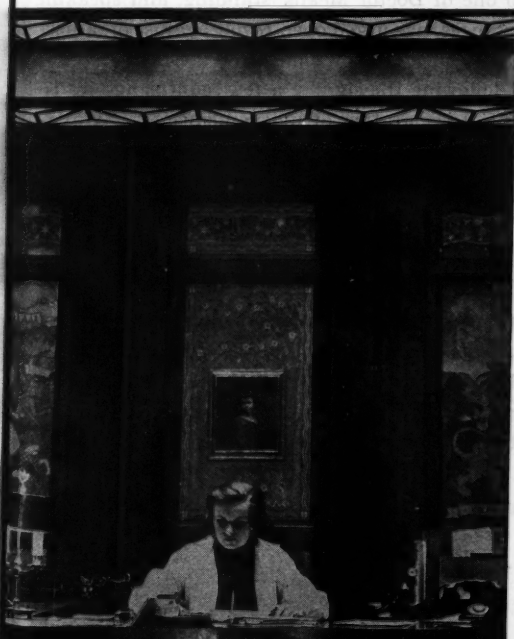


**Rotunda,
Bobs Roberts
Memorial Hos-
pital for Chil-
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Another view of the rotunda, Bobs
Roberts Memorial Hospital for Chil-
dren.



View of the reception desk in
the rotunda of the same hos-
pital.



pregnancy. Tooth development, in its gross, microscopic, and embryological aspects, is also the subject of intensive research.

With its staff of twenty-three persons and its excellent facilities the Zoller Dental Clinic is be-

ing developed skilfully into a unique center of dental research which, it is hoped, will in time bring to all dentists a better understanding of the relationship between oral lesions and general systemic conditions.

MEDICAL PROFESSION URGED TO REVOLT

CALLING ON ALL those physicians "who believe in popular government to bestir themselves" James H. Means, M.D., of the Harvard Medical School, created a sensation in his presidential address at the annual convocation of the American College of Physicians held recently in the Hotel Waldorf-Astoria, New York. He appealed to the group to organize "an effective opposition party" to the American Medical Association. Because no one of Doctor Means' standing, and speaking under similar circumstances, has urged open revolt against organized medicine, his speech was considered by some to be the next step in a "medical revolution," following the signing a few months ago by 770 physicians¹ of a "medical declaration of independence."

"The behavior of the American Medical Association," Doctor Means said, "is political. It is partisan behavior. It champions a cause. At the present time the cause is something close to standpatism.

"But the policy can be changed at any time," he added, "if the membership wills it. At the present time the electorate of the American Medical Association is apathetic and inarticulate because it has no issues, no platforms set up to vote for. It is allowing the medical politicians to run things about as they please and official spokesmen, like Jove on high Olympus, to hurl their thunderbolts of wrath at all who differ with orthodox doctrine."

¹Medical Men Seek Changes in Health Care, ORAL HYGIENE 27:1639 (December) 1937.

SOCIAL SECURITY

Begins With the Child

THE CHILD IS THE focal point in any social security program. Every measure adopted for social security in some way affects the welfare of the child—even old age security, which releases the resources of the middle aged for the care of children rather than the aged. With this fact in mind, President Roosevelt's Committee on Economic Security, while laying the preliminary ground work for the Social Security Act in 1934, called upon the United States Children's Bureau to develop the factual material needed in formulating the parts of the Social Security Act¹ relating to maternal and child health.

An Advisory Committee worked with the Children's Bureau in determining the status of maternal and child health in the United States as of 1934. Based on their findings this Committee made recommendations, not for a complete child health and welfare program, but to cover those parts of the problem most closely related to unemployment.

This Committee's survey was made during the depression. The report of their work, published recently by the Social Security Board,² graphically reveals the

tragic effect economic hazards have had on maternal and child health. With the deepening of the depression there was a gradual shifting of responsibility to the Federal Government for the care of many mothers and children. Local and state appropriations were cut to the minimum, and there was no place to go for help except to the Federal Emergency Relief stations. Consequently, in December, 1934, there were 8,000,000 children under sixteen years of age in families listed on relief rolls. Of these millions of children who were being shuffled about and given the minimum of emergency care, many thousands, either because of being deprived of their father's support or because of handicaps were entitled to well-planned, long-time aid under the terms of legislation long since enacted by states to care for dependent children.

Although in 1934 there were forty-five states authorized by statute to give regular aid to families deprived of the father's support by death, desertion, or other reasons, less than half the local units empowered to provide this type of assistance were giving it.

¹Richardson, F. H.: The Child, the Dentist, and the Social Security Act 27:627 (May) 1937.

²Social Security in America, The Factual Background of the Social Security Act as Summarized from Staff Reports to the Committee on Economic Security, Social Security Board, Washington, D. C.

"Of America's 2,000,000 maternity cases each year, at least 158,000 result in the death of mother or child (maternal deaths: 14,000; still-born infants: 75,000; infants dying during the first month of life: 69,000). And of the 2,000,000 babies, 840,000 are born to families with annual incomes of \$750 or less."³

³Report of the Conference on Better Care for Mothers and Babies, Washington, D. C., News Week 11:28 (March 21) 1938.

Unfortunately, the majority of these statutes were permissive, not mandatory. It was easy for the local communities and states to slip out of their obligations when the financial burdens of the depression became too great.

The total amount spent in 1934 by all state and local authorities for aid to dependent children was about \$37,500,000. This not only failed to reach more than half of the counties authorized to grant aid, but in some localities the amount of aid given per family averaged as low as \$9.00 per month. In others, families received \$51.00 per month, although the laws permitted much more. By November 15, 1934, only 109,000 families, including approximately 280,500 children in the entire United States were receiving even this meager aid. On the other hand, 179,000 families with dependent children were being carried on federal relief rolls, subject to blue penciling whenever these emergency expenditures would be curtailed. In the face of the fact that only 109,000 of the nearly 300,000 families that should have been receiving long-time, planned aid were given any kind of assistance by local and state funds, the Committee rec-

ommended that federal grants-in-aid be made to states so they might in the future aid local units in caring for dependent children.

In analyzing types of service being given to children the Committee suggested that child welfare service for those needing special care was the most important part of any state-wide program. This means the furnishing of public social workers to give skilled investigation to blind, hard of hearing, crippled, delinquent, truant, feeble-minded children, or those having tuberculosis or some cardiac or parasitic disease. There are more than 10,000,000 such handicapped children in the United States needing this specialized service.

Funds for this work, the Committee reported, had been seriously curtailed by the depression with the result that only about 5 per cent of all the counties in the country with less than 30,000 population employed public social workers. Up to January, 1935, only twelve states had recognized the need for local public social service for children. It was the thought of the Committee that any child-welfare program should be closely related to a family welfare and relief pro-

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gram, if possible, being part of a unified public welfare service. They recommended a federal appropriation of \$1,500,000 to aid the states in extending public welfare services to children, especially in predominantly rural areas.

Maternal and Child Health

Examination of the maternal mortality rate in this country showed the Committee that it was exceedingly high compared to foreign countries. In contrast, the reduction in the infant mortality rate had been striking since 1915, in the age range from the second to the twelfth month, with Washington and Oregon

having the lowest rate. This the Committee attributed to the education of the public in regard to infant care and improved public health measures in general. They indicated they considered this record justified the expansion of maternal and child health programs in all states.

In their survey of the health of preschool, school, and adolescent children, the Committee found that there had been an alarming increase in recent years in the number of undernourished children, those in need of medical care or the correction of remedial defects. Sickening rates in depression families increased while the amount of medical care de-



Plaque of Bobs Roberts on the wall of the foyer of the Bobs Roberts Memorial Hospital for Children, Chicago, erected and endowed by John and Mary Roberts for their son, Charles Radnor Roberts (October 28, 1911-March 23, 1917.)

creased, and the supply of milk was inadequate for many families. Another alarming feature of the current trend was the increase in mental instability among adolescents. Greater than ever before in the history of the country, the need for adequate health supervision seemed to the Committee.

Status of Health Care

One of the factors that appeared to contribute to the low status of maternal and child care in 1934 was the expiration of the Maternity and Infancy Act in 1929 and the consequent stopping of federal aid to states for this work. Under the terms of the Act all the states except one had established bureaus of child hygiene by 1923. In 1928, states had a total of \$2,158,000 to spend for maternity and infant care, which included federal appropriations. By 1934 their funds had been cut to \$1,157,000, in the face of growing need, and nine states had no special appropriation whatever for this work.

Although public health nursing is the most efficient method of reaching health problems, only one-third of the rural counties in twenty-four states had permanent county-wide nursing service in 1934, and there were not nearly enough health centers. In twenty-five cities nurses examined 9,472 children and found that 31 per cent needed medical care. In 833 cases no treatment could be given because there were no funds available.

In their recommendations the

Committee stressed the need for a program that would permit the Federal Government through the Children's Bureau to cooperate with states and territories in providing for the health and welfare of children and mothers. It was their thought that local county or community health services should develop a program in cooperation with medical groups, educational authorities, and nutrition experts. This should also provide for individual instruction in schools, for adults, and for community groups. Members of the Committee favored medical, dental, and nursing service provided by local physicians and dentists and full time public health nurses employed by the health departments. Payment of the physicians and dentists, they advised, should be made by the local health department, and the educational and preventive aspects of maternal and child health services stressed.

A State-wide Program

For a state-wide program the Committee advocated that the state health department through the division of maternal and child health should aid in the development of local health services. They should offer consultation and guidance, demonstration of services in communities, and develop a state-wide educational program. The suggested staff of the division of the maternal and child health would consist of a physician, as director,

and a staff of physicians and a full-time dentist; part-time regional consultants in the fields of pediatrics, obstetrics, and dentistry; state supervisory and regional advisory nurses; and an additional special staff in the fields of nutrition, mental hygiene, and health education.

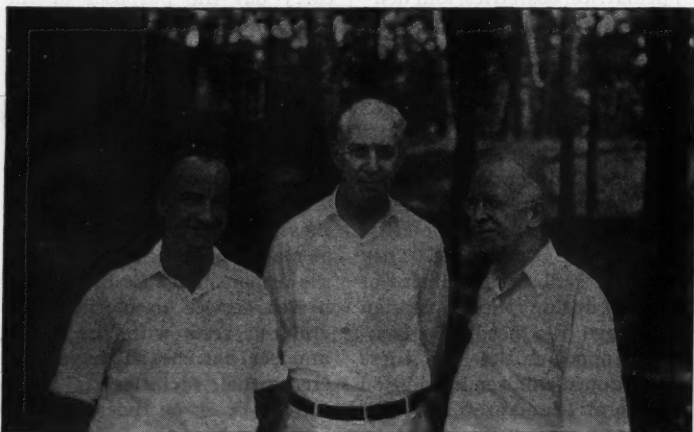
The inadequate and uneven care provided for cripples and those with chronic diseases was the subject of considerable criticism by the Committee. They noted the serious curtailment of services during the depression and urged the need of educational opportunities for these handicapped children in addition to restorative and preventive services.

With this picture of the status of child and maternal health drawn by the Child Welfare Advisory Committee before them, the Committee on Economic Security made its recommendations which were largely incorporated in the Social Security Act. Under *aid to dependent children* a sum of \$24,750,000 was authorized by

the Act for the year ending June 30, 1936, and for each fiscal year thereafter a sum sufficient to carry out the purposes of the title. An annual sum of \$3,800,000 was provided to aid states in carrying on maternal and child health programs; for services to crippled children, \$2,500,000 a year; and for child welfare services, \$1,500,000 annually.

The appropriations, except those for child welfare, were to be matched by the states, so that the responsibility for broadening health service to mothers and children rests with the states, and local agencies will have to increase their facilities and funds for this work as the emergency relief funds of the Federal Government are curtailed. Although the provisions of the Social Security Act represent an encouraging trend toward more liberal health service, they make no specific appropriations for dental service and they by no means solve the national health problem which is daily taking on broader dimensions.

THE *Album* OF



THE LAST PICTURE of the late Arthur D. Black, made July, 1937 at the Lundquist cottage, White Lake, Michigan. With him are G. R. Lundquist (left), and R. E. Blackwell (center), of Chicago. (Submitted by Sidney A. Wiggins, Rock Island, Illinois.)



NEIL BAIN (right), former president of the Portland District Dental Society, gives a demonstration of gold foil insertion for A. J. Brock (left), Portland, and B. C. Olinger (center), The Dalles, Oregon, at the Alumni Meeting of the North Pacific Dental College held in Portland February 24-26. (Submitted by Claude W. Clifford, Salem, Oregon.)

DENTAL LIFE



DOCTOR ROSE (left) demonstrates his technique for the insertion of gold foil at the Portland Meeting. He is assisted by Mary Haverkamp and O. H. Ferris, Portland.



ROY WEST, Seattle, (left) gives a demonstration of the removal of an impacted mandibular molar. Others in the picture are Betty Burnett and Betty Blair, dental hygienists of Portland, and L. L. Foote, Seattle.

A DENTIST *Speaks* for the HYGIENIST

by C. ELIZABETH KARTZMARK, D.D.S.

NOTING THE RECENTLY aroused controversy in ORAL HYGIENE on the status of the dental hygienist, I am grateful, because I feel that at last she has made herself heard. It is high time that the circumstances under which the dental hygienist has been working, in the cause of health, were brought out into the open and thoroughly aired.

After reading the adverse comment under the title MICHIGAN EXAMINES,¹ I am prompted to deplore the implication, slight as it may be, that the dental hygienist should be eliminated. It is surprising to find men, presumably intelligent persons interested in public health, who would record such trivial complaints.

The hygienist was created to do a job long since neglected by the dentist and one which is still neglected by many who are ridiculing her work. Can it be that dentists are afraid of their position with the public? Or, is it just that they are unwilling to have their patients show an appreciation for preventive dentistry? In either case, the dentist stands convicted of failure to perform his duty.

Dentists and hygienists, alike, should be teachers of health. That should be the second, if not the first prerequisite for a degree from every dental college.

We all know that there are not enough dentists to serve the dental needs of the public. Then, why not be more far-sighted and enlist the aid of the dental hygienist in giving as much service as possible?

The favorable comments contained in the article,¹ previously mentioned, show quite clearly that the hygienist is doing a splendid piece of work, even though handicapped in many respects. A few months ago, a dentist commented to me, "It's difficult to find a good hygienist, nowadays," and, I regret to admit, I, too, share his opinion. If I may, therefore, I shall endeavor to give the reasons for this predicament.

A hygienist, to be an asset to her employer, must be a high type of young woman possessing a dependable character, intelligence, digital dexterity, honesty, personality, ambition, diligence, poise, and business ability.

Why should a young woman with such qualifications spend one, two, or even four years of

¹Michigan Examines. ORAL HYGIENE, 27:1336 (October) 1937.

her life and a considerable sum of her parents' money training for a job that will net her only a meager \$18.00 a week, out of which stipend she is compelled to spend much for the laundering of her uniforms?

When dental hygiene was in its infancy, hygienists were paid a decent, substantial salary. I know, because I was one. Now, however, any number of hygienists have been forced to give up practice simply because they are asked to work for less than a living wage. Many have had the courage to refuse the present inadequate remuneration and are engaged in other lines of work, others, lacking this courage, but in need of jobs, have been forced to accept this low scale of wages. There are, of course, *some* dentists who are human enough and fair enough

to recognize an individual's worth. They also realize that it is intelligent to place a few dollars more in an employee's pay envelope as a stimulus to initiative, better work, and greater loyalty. They know that economy at the expense of a competent dental hygienist is not sound business practice, nor does it represent a high type of professional ethics. After all, although many near-sighted men fail to recognize this fact, the hygienist is a producer. The contention that she does not pay her way is a fallacy. A good hygienist does even more than this in the rendition of dividends to her employer.

Just as there are good, bad, and indifferent dentists, so one finds hygienists of similar caste. There are in every group undesirable elements but that is no reason



Helen Hoover, Northwestern University Dental School, with dolls representing various nationalities of dental hygienists, at Chicago Midwinter Meeting. (Submitted by Daniel D. Peterson, Chicago.)

why a dentist cannot find and hire a good hygienist. If he will offer decent financial remuneration, he can secure one, though, perhaps, not as easily as heretofore, for they are fast disappearing. If a dentist judges his hygienist's earning power by only the income from prophylaxis—he is giving to her but partial credit. There are innumerable duties which she performs that, although not actually recorded in so many dollars and cents, do possess a hidden cash value accounted for in the ultimate trial balance. Why not recognize them and, incidentally, *pay* for them?

Training Inadequate

The hygienist's training is, I admit, too limited. There is much that she should be taught before she is turned over to the profession and the public. Many of the early graduates, recognizing this fact, are trying to remedy it by taking evening courses either in colleges or with groups, under the tutelage of competent instructors. The recommendation by the Committee from the Michigan State Dental Society¹ for the creation of two separate courses of training—one for dental office practice, the other for public health work, has much in its favor. These two branches of the profession are so widely different in scope that each requires special training and the proposed plan would take care of this need.

A recommendation I should like to make is that all student hygienists be under the direct

supervision of a registered, full-time dentist with a graduate hygienist assistant, rather than under the supervision of only a dental hygienist, as is the present custom in some schools. This "dentist supervisor" should teach "laboratory technique" in the making of models, carving and casting inlays, preparing impression materials for insertion, mixing cements and alloys, and so on, as well as giving instruction in the removal of calculus and the polishing of teeth. He should also supervise the work in the clinic. A "hygienist supervisor" is not equipped to do justice to the teaching of these duties, yet they are requisites for a well-trained hygienist.

A Practice Builder

Because it is virtually impossible for a dentist to spend sufficient time on the education of his patients and a routine prophylaxis of their teeth, a trained worker, call her what you will, "hygienist" or "nurse," is essential to the economy and success of his dental practice.

As a practice builder,² the hygienist can be a powerful force, as many dentists who have availed themselves of her assistance, will testify. Her services can be given to patients in the middle and lower brackets for a fee below that which the dentist should charge on the hourly rate schedule for his services.

¹Jeffreys, Margaret: What Is a Dental Hygienist, *ORAL HYGIENE* 27:1330 (October) 1937.

The "recall system," developed by many hygienists, is the means of establishing a steady flow of patients in and out of the office. These systematic visits for prophylaxis and educational talks keep the patients in a receptive frame of mind for dental service. An ordinary practice ought to require at least ten prophylactic treatments a week. That means ten hours (a good prophylaxis takes an hour for completion) the dentist could devote to other patients.

After all, isn't it better for a dentist to have more patients appearing frequently, their soft tissues in a healthy condition, with a few small cavities, than a

smaller number of patients who present themselves for treatment, perhaps, only when the teeth are in serious need of repair? Shouldn't the aim of every dentist be more preventive than restorative service?

May I suggest that instead of finding fault with the dental hygienist, the dental profession look to its own short-comings in its treatment of this professional asset? The hygienist is willing and eager to follow the profession's guidance. Let us adopt a constructive, rather than a destructive, attitude toward her.

307 Alden Avenue
New Haven, Connecticut

STATE BOARD EXAMINATIONS

Ohio State Dental Board, June examination, College of Dentistry, Ohio State University, Columbus, the week beginning June 27. All applications must be in the hands of the Secretary at least ten days before date of examination. For further information write to Morton H. Jones, D.D.S., 1553½ North Fourth Street, Columbus, Ohio.

Maine State Board of Dental Examiners, next examination, Augusta, June 23-24-25 for dentists and hygienists. All applications must be on file ten days before examination. For information write to Fred B. Wheaton, D.M.D., 319 Main Street, Biddleford, Maine.

New Mexico Board of Dental Examiners, regular meeting, June 20-24, Albuquerque. Address all communications to J. J. Clarke, Sr., D.D.S., Artesia, New Mexico.

Connecticut Dental Commission, regular examination of applicants to practice dentistry and dental hygiene, June 21-25, Hartford. Applications should be in the hands of the recorder at least ten days before the meeting. For information write to Almond J. Cutting, D.D.S., Southington, Connecticut.

Mississippi Board of Dental Examiners, annual meeting, for the examination of applicants to practice dentistry and dental hygiene, June 21, State Capitol Building, Jackson. Application together with fee of \$25 must be in the hands of the Secretary not later than June 1. For information write to A. B. Kelly, D.D.S., Yazoo City, Mississippi.

Opinions Differ On

DENTAL HYGIENISTS

THE STATUS OF THE dental hygienist in the dental profession was the subject of a timely discussion at the Chicago Midwinter Meeting by Harry G. Morton, D.D.S., Milwaukee, and Edgar H. Keys, D.D.S., Saint Louis. Although both speakers referred to the useful work that can be done by the dental hygienist, they disagreed on her indispensability. Doctor Morton pointed out that he considers a dental hygienist essential to the efficient handling of prophylactic work in his office, and further emphasized this by saying that he would compel the use of a dental hygienist in every dental office in the United States. Contrary to this view, Doctor Keys declared that he had solved the problem in his own office by having a young dentist do the prophylaxes and children's dentistry. He considered his system ideal.

In preparing for his discussion Doctor Keys took cognizance of the fact that since the first state legalized the dental hygienist twenty-three years ago, thirty-one states have recognized her, which means approximately 50,000 dentists. With this in mind Doctor Keys sent questionnaires to every state board secretary and many other key men to de-

termine what the general attitude was toward the dental hygienist. He based his discussion on replies received.

Some of the comments made by dentists on this questionnaire were: "the dental hygienist saves the dentist time on prophylaxes"; "takes more interest in prophylaxis than dentist does"; "puts dentists on level with medical men"; and "aids in handling children." This last point was stressed by a number of dentists.

In analyzing the services of the dental hygienists Doctor Keys said that three objections were brought out: First, the dental hygienist is permitted to clean only exposed surfaces, which means that she is sometimes hampered in getting good results in a prophylaxis. Second, as an emissary of dental health propaganda, the public schools object to her because her meager training does not bring her up to the educational standard demanded of public school teachers in general. Third, a dental hygienist sometimes tries to take patients with her to another dentist. With reference to this last statement, Doctor Keys said he had been unable to find much proof of law violations.

Concluding the discussion Doc-

tor Keys pointed out briefly what his findings on the dental hygienists had been:

1. Over a period of twenty-five years, dental hygienists have been a law abiding group.
2. If they have sufficient education they may be trained to do good work.
3. They can be extremely useful through combining profes-

sional work and office routine.

4. The dental hygienist could be most useful to the orthodontist.

5. Dental hygienists should not supersede dentists in educational work—dental schools should give courses in public dental health work so dentists will have the necessary training to direct educational programs.

FIRST RETURNS ON NEW YORK QUESTIONNAIRE

IN REPLY TO THE question, "Would you be willing to give full time to any dental project proposed at a fixed weekly salary?" two-thirds of the 619 New York dentists responding answered "Yes." This was revealed in a preliminary report¹ issued regarding a questionnaire sent to the members of the First District Dental Health Society in New York under the sponsorship of J. H. Trier, D.D.S., President, and his Public Health Committee. Of those who responded 23 per cent said they would be willing "to give full time to any dental project proposed at a fixed weekly salary," if it were supervised by organized dentistry. About 66 per cent of those responding indicated they were willing to accept patients at low fixed fees from the low income group who, at the present time, are not receiving dental attention. Answers to the questionnaire also revealed that the average dentist has eight "office hours" per day out of which he is idle two hours and ten minutes—an amount of time sufficient to enable these dentists to take care of 3,500 children per week. Further reports on the results of this questionnaire are being awaited with interest.

¹Progress Reports on Dr. Trier's Questionnaire, N. Y. J. D. 8:133 (April) 1938.

MOUNTEBANKS *and* MOLAR BUILDERS

by J. P. LEONARD, D.D.S.

PROBABLY ONE OF the best "straws" to judge which way the modern day economic typhoon is whirling is to observe the recent prolific increase of the jovial Pied Pipers who canter daily into our hectic business lives with bizarre baubles and bivious schemes to help lift the Specter of Uncertainty from dentistry's wrinkled brow.

Evidently, the depression is acutely on the wane!

At least, the highways and byways are teeming again with those glib and effervescent exponents of piffle who specialize in preying on meek and gullible dentists. The Big Bad Wolf and Ivan the Terrible were merely sweet tempered lollypops in comparison with the honeyed and fantastic charlatans who barge over the dental horizon today spouting elaborate plans for synthetic dental uplift.

Their stories vary in structure and their theme songs are tuned to different wave lengths, but their babble about financial betterment has an old and familiar ring. In other words, they all use the same password which the Ancient Order of Chisellers has deified down through the ages. Surely you will agree that it is

expressive and colorful—"Never give a sucker an even break."

Perhaps I am only a Voice crying aloud in the Wilderness, but I shall feel well repaid for my efforts if this warning of expurgation serves as a spark toward using a hot cautery and a flit-gun on these nonessential vermin.

Before proceeding further with any discussion of this subject, it will be only fair to admit here that I am not carrying a chip on my shoulder against the legitimate dental prospector. Neither am I concerned greatly about the inherent merits of respectable dental merchandise so long as the people who sponsor it are trying to conduct their business in a legitimate manner!

There are, for example, many dental manufacturers who put on splendid courses of real technical value and worth while information for the dental profession. These courses are organized legitimately, presented sanely and effectively, with the result that the dentists in attendance actually acquire much useful information from them.

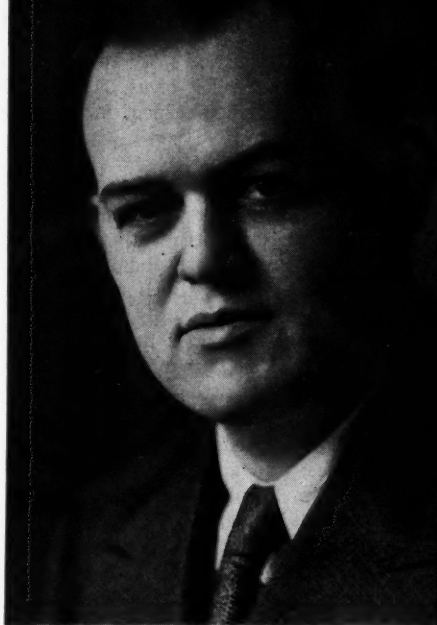
Any dental society, be it county, district, or state, in scope, can well be proud to sponsor such a

well balanced program. In general, the meritorious conduct and technical values involved will more than repay the postgraduate student and clinician.

With this brief and candid explanation of our stand in regard to the legitimate type of dental promotion we will hurry along now into a discussion of the other side of the picture.

There are many different varieties in the breed of mountebanks who plague the placid tranquility of your dental office, and mine. Some of them pose as diet-fanatics while they spiel off long formulas and talk of longevity as if it was their own inalienable birthright; some of them try to get on society programs through the medium of screwy and nonessential inventions, plus a thick veneer of badly adulterated ballyhoo; some of them have a satchel-full of newspaper clippings and homemade credentials to impress the world-at-large that they are really bringing a message of tremendous dental importance to each and every popeyed and rusty practitioner; others bluntly profess to be dental economists, or international psychologists, or esthetic engineers—and they all confess to a burning desire for a forty hour week for dentists.

During the lean and hungry years which followed the Market Crash of 1929, these wonderworkers and self-styled wizards were conspicuous by their absence. Possibly, they were too busy trembling in the Cyclone Cellar



J. P. LEONARD, D.D.S.

of Doubt to bother any about the spiritual, financial, or ethical guidance for the dental disciples who were suffering acutely from the general business fiasco which prevailed at that time.

Anyway, we who lived in the hamlets and villages were not molested to any great extent by the smirking and itinerant slickers. In fact, during some of those years, we were not haunted at all by strangers with tall weird tales, but we were worried considerably by the gaunt and gloomy countenances of our pensive landlords.

Confidentially, the poor men were a bit overwrought with con-

cern about the welfare of their tenants, but, at least, you must admit they didn't try to peddle any "goldbricks" to us. They deserve our deep respect for that!

Aladdin From Afar

(For obvious reasons, the characters described in the following dental drama are mostly fictitious—to comply with the interstate niceties which the libel law demands.)

Let us consider here the putrescent text about the visiting maestro who stomps into your office and mine, with a cagey gleam of benevolence in his calculating eyes, and a flabby outstretched palm, spouting psalms of piffle about his *new* denture technique, with a hurried look over his shoulder, at irregular intervals, to be sure that the sheriff isn't within hailing distance!

Or maybe it happens this way. Your telephone rings. You answer it right away—in self defense—and find your old friendly competitor, Doctor I. O. U. McGargle, bubbling over with enthusiasm. He wants to tell you all about his new discovery—says he found "The Dental Messiah."

Of course, you gulp hurriedly and ask for more detailed information. The "doc" explains that he has a visiting "phenom" right there in his office, who knows all the important answers to every difficult problem in dental economics, can whittle down bridge abutments in jig-time, diagnose an incipient stage of pyorrhea at twenty paces, or turn out a stag-

gering prognosis about the corporate limits of your prospective patient's pocketbook.

Then "doc" talks on, in glowing terms. He says this Modern Aladdin is as versatile and colorful as a rainbow, but, shhh, he's especially gifted when it comes to making dentures! Doc McGargle wants you to meet Aladdin as soon as possible, and judge for yourself.

So, eventually, you meet the visiting "doctor." You are duly impressed with his worldly swagger and grandiose mien. He seems to be a Great Guy. And he seems to know most every dentist you can mention from Maine to California—knows them in a big way too. You soon forget to worry much about the fact that you never heard about this fellow before in any dental publication or research enterprise. You can't be blamed for accepting this self-styled wizard at face value. He is really an expert all right—an expert at selling himself!

Aladdin tells you that he can come over to your office and construct a denture for you. Says he can really show you a few wrinkles about the "denture game" that will actually stiffen your wispy hair and noticeably increase your denture income.

Aladdin explains that he will also check up on some of your "tough" denture cases. Promises to get more for the case than you ever dreamed was possible. Then he tells a few choice stories about how he got a shiny new four-door sedan in payment for a set of

dentures he delivered to a distributor in Walla-Walla. Another time, it was a rich jeweler patient who separated himself from a 4 karat diamond to show his appreciation.

By this time you are weak from imagining the possibilities of the scheme and invite the Dental Messiah to visit your office and put on a practical demonstration. He accepts, after explaining that he only wants \$50.00 a denture for himself, and you can keep all the rest—after you have paid the supply and laboratory bills. It looks like a cinch.

You know the rest of the story too. After the "specialist" has completed a few cases at grand larceny rates, he moves on to other sylvan fields. But, you remain to reap the hurricane.

Years later, when you meet some of your associates at a national meeting and ask them about Aladdin, they will probably sigh and say "Did that blankety—*;; swindle you too?"

There are other breeds of parasites who are always anxious to help dentists hurdle the barrier of financial worry. They do not attempt to invade the field of dentistry, but confine their "red hot tips" to other realms of high-powered enterprise! Under this heading you can include oil stock promotions, gold mine manipulations, subdivision air castles, and the other similar Blue Sky adventures which reek with the aroma of a phony white elephant.

Let's not overlook the Voice that calls you on long-distance and seems worried that you will miss out on a Blue Chip Stock which he has the low down on. (He is calling from a "boiler room" of a Bucket Shop in a near by town!) Or maybe you are acquainted with a tipster who loves to talk about the primary and secondary trends of legitimate stocks, but when you invest your money with him you never get exactly what you expected. (Unless you expected a trimming!)

The average dentist is a gullible soul. We know considerable about our line of public uplift, but we are too prone to accept the stranger's glib story—especially if the affable gentleman has a brief case full of credentials which look authentic to our casual glance.

Too many dentists have wound up in the *red* after taking a "flyer" with the itinerant representative of Santa Claus, when a little deliberation might have paid heavy dividends if the molar disciple had only taken a good look before he leaped.

Remember the saying "You can't expect to have your cake, and eat it." It is better to be satisfied with dentistry's honest and meager fare, rather than suffer any unnecessary hunger pangs from remorse and regret.

703 Union Building
Davenport, Iowa

DENTAL SERVICE GOES TO ALASKA

by J. G. MANSER, D.D.S.*

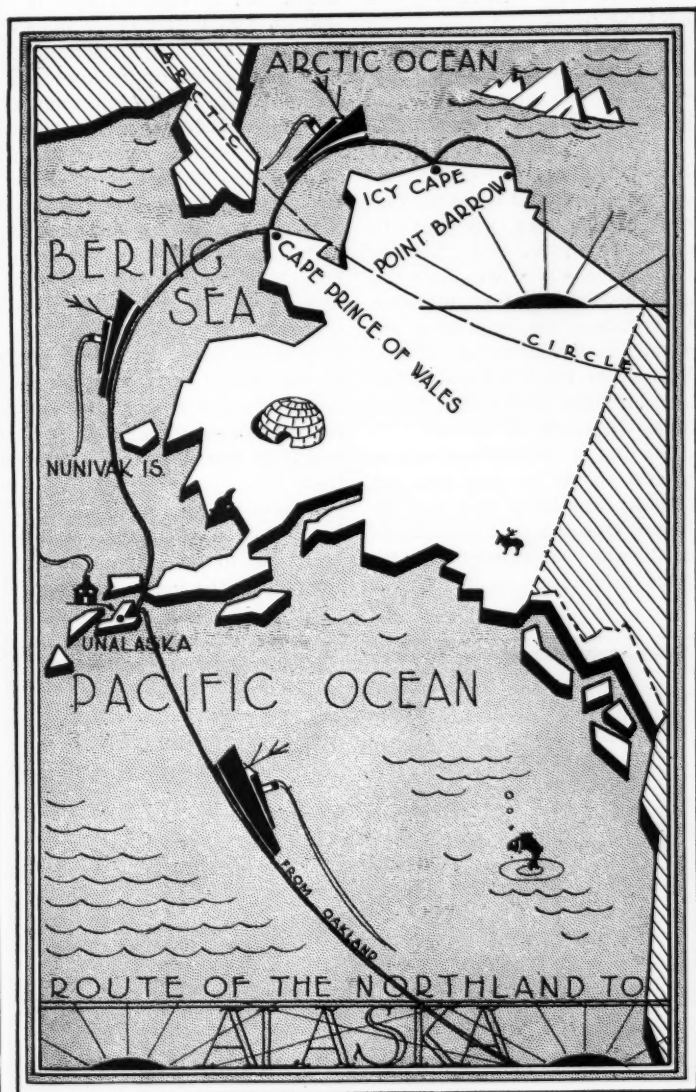
EACH SPRING, IN THE wake of the northbound wild goose, a trim white ship—sometimes referred to as the "Arctic Angel," but officially known as the Coast Guard Cutter *Northland*—casts off from her berth at Oakland, passes through the Golden Gate to the North Pacific, the Bering Sea and Arctic Ocean, following the receding ice floes northward along the coast of Alaska across the Arctic Circle.

The mission of the *Northland*, aside from those patrol duties usually assigned Coast Guard Cutters, is riding herd on seals and carrying medical and dental aid to the Eskimos, isolated traders, school teachers and prospectors. The *Northland's* Alaskan base is Unalaska, which is at the eastern end of the Aleutian Archipelago and to which point the *Northland* returns in midsummer to refuel. The seven months comprising the arctic spring, summer, and fall are spent in cruising along the Alaskan coast, the itinerary being planned so that the most northern points, such as Icy Cape and Point Barrow, are reached in early August, as

at that time the ice floe has receded almost to the great arctic ice cap and open leads are to be found.

As each village is visited, the dentist and physician, with their assistants, are taken ashore and clinics held for the Eskimos. From voluminous statistics compiled during 1932-33 cruises, it was found that 55 per cent of all Eskimos examined showed some type of dental lesion and were in need of treatment. It was also noted during this survey that, in those areas where civilization had made most progress, the teeth of the natives were proportionately worse. In the most primitive and isolated region, Nunivak Island, only 15 per cent showed evidence of dental lesions and, paradoxically enough, the only village on the coast where fresh vegetables were grown showed the highest percentage, 90 per cent, of dental defects. The logical conclusions to draw from these observations is that dental defects occur in proportion to the use of white man's food by the natives. Probably the most common articles of white man's food are white flour, tea, and sugar. The flour is made into an unleavened paste, with or without salt,

*Doctor Manser has served as a dentist for a year with the Coast Guard Cutter *Northland* in Alaskan waters.



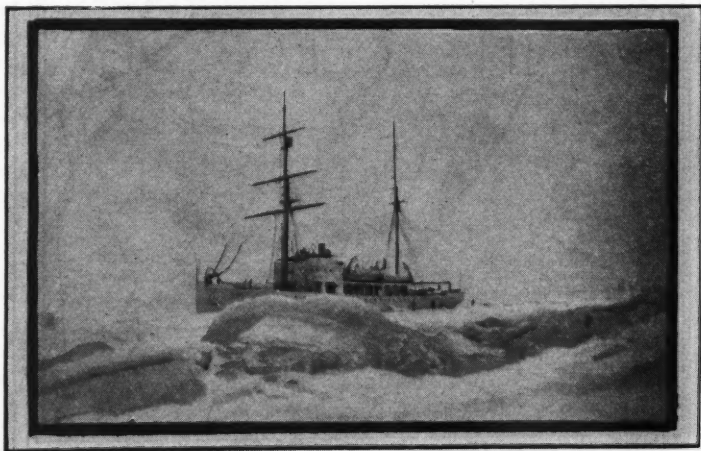
and then is fried—with a very unpalatable result.

The Eskimos on Nunivak Island, where the percentage of defects is lowest, subsist largely on fish and seal with occasional "oogrook" or walrus meat to vary their diet. Almost the entire carcass of the animal is eaten. The skins and bones are put to various domestic uses. Another condition observed was that the half breed Eskimo was much more susceptible to dental lesions, especially malocclusion and caries, than either his full blooded Eskimo or white companions living under the same conditions.

The diet of the Eskimos was of interest to me as they will eat virtually anything that can be chewed. One dish that seemed unusual was "agootuck," locally called Eskimo ice cream. It is a

mixture of berries, reindeer fat, seal oil and a few other ingredients packed into a section of walrus intestine and allowed to freeze. We saw an Eskimo woman cooking a dish which consisted of gaudy billed puffins, from which the feathers were carelessly plucked and the feet removed and, with only this meager preparation, placed in a pot to boil. The main appeal of the dish to me was the glassy glare of the blue eyes of the birds as they stared out of the boiling pot. Hardboiled sea gull eggs, if not too ancient, are highly prized delicacies among the Eskimo children and they munch at them during their play.

In one village, during an examination, a peculiar rounding hole was found extending into the pulp of the lower first molar.



Coast Guard cutter NORTHLAND makes her way through the ice floes of the Arctic Ocean.

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An open air dental clinic for the Eskimos.

It had the appearance of having been made with a round bur. On questioning the young man it was learned that when he was away in his outlying trapping cabin, he suffered with an excruciating toothache and, in order to get relief, heated a nail red hot and holding it between two sticks, with the aid of a shiny tin can for a mirror, plunged the nail into the pulp of the aching tooth. He stated the pain was relieved and was somewhat reluctant to submit to the extraction of the tooth. An example of Eskimo ingenuity and handicraft was witnessed in the form of an inlay carved from tin, which had been melted from tin cans, to fit a mesio-occlusal cavity in the lower bicuspid; the decay having been scooped out and the inlay carved using only a pocket knife.

The attitude of the Eskimos in

receiving free dental care from the government was usually passive and indifferent, but in some villages it became a fad to visit the dentist and for this reason requests were made to extract or fill sound teeth. From year to year the Eskimos are becoming educated to dental treatment and look forward to the annual visit of a dentist to their village.

An almost extinct custom among the Eskimos, of interest to the dentist, is that of piercing the lower lip in an area contiguous to the cuspids and inserting labrets. These lip ornaments vary in size, ranging from a half inch to two or three inches in diameter. The general design resembles a mushroom and may be made of ivory, bone, wood, or stone. In those observed there was no leakage of saliva to the outside, whether the labret occu-

pied the hole or was missing. Nor did there appear to be any irritation of the soft tissue owing to the presence of the foreign object.

Oriental Aspect

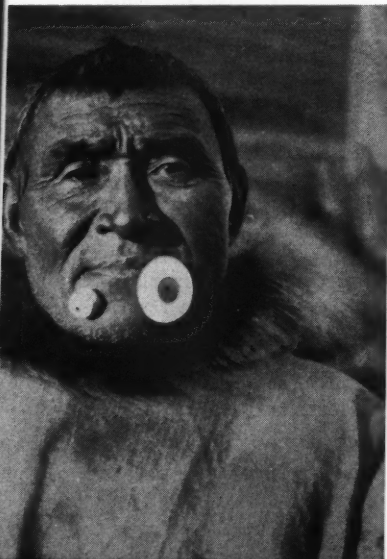
The oriental make-up of the Eskimos is one of the most outstanding characteristics noted by the traveler in Alaska. To me it substantiates the theory that our American Indians are of Asiatic origin, having crossed via the Bering Straits. To this day the Eskimos at Cape Prince of Wales visit with the tribe on Little Diamede Island in the middle of the Straits and those on Little Diamede visit with friends and relatives on East Cape Siberia. The crossing is made in their own skin-boats or "umiaks" propelled by outboard motors or sails and

paddle. The distance across the Bering Straits is fifty-four miles. There is an official record of Captain Max Gottschalk having crossed the Straits on the ice during the winter of 1913 with a dog team and sled.

In ancient times the Eskimos recorded events of life by carved picture writing on ivory walrus tusks. There have been found some interesting examples of this art in the middens of deserted villages, including ivory figurines and what must have been ornamental objects and replicas of animals indigenous to the area. However, this art has degenerated into the commercial carvings of bilikins, cribbage boards, and paper knives.

To the casual observer the general appearance of the native dances of the Eskimo and of the Pueblo Indian is somewhat similar in that both groups have dancers, drummers, and singers. The Eskimos add to these another group called "followers," or those that are learning the chants. It is characteristic of the Eskimo dance that the individual dancers stay in a small area and most of the rhythm is expressed in the motions of the torso, head, and arms. This is probably owing to the fact that Eskimos frequently dance within their houses or "barabaras" and "kashims." One feature in the Eskimo dance that further convinces one of the Asiatic origin of the race is the manner in which the feet and knees are turned outward having

Eskimo wearing labrets inserted through holes made by piercing his lip with a sharp stick or piece of bone.



the same appearance as Siamese temple dancers.

The construction of the drums is unusual. The drum is somewhat the shape of a palm leaf fan and is made by stretching a skin taut over a wooden frame which ranges in diameter from about 14 to 22 inches. To this frame is attached a short wooden handle by which the drum is held. The stick used to strike this instrument is a limber wand. The drum being held in one hand and the stick in the other—both hands move up and down in rhythm, with the drum striking the stick as much as the stick the drum. The number of drums varies with the size of the group—each drum being made of a different skin, therefore each having a different pitch. Two tones may be gotten from each drum by hitting either the skin directly or hitting the skin and wooden frame at the same time. The pitch of the instrument is also varied by sprinkling water on the head.

A sojourn in the Arctic is a



Another type of labrets inserted and worn by Eskimos in their lips.

never to be forgotten event. You become a part of the vastness, the monotony, the cold, and the quiet. Alaska grows on you and gets into your blood, and once you have been there, there is always a longing to return to that enchanting land of the Midnight Sun.

*403 First National Bank Building
Albuquerque, New Mexico*

Editorial Comment

GIVE ME THE LIBERTY TO KNOW, TO UTTER, AND TO
ARGUE FREELY ACCORDING TO MY CONSCIENCE
ABOVE ALL LIBERTIES. *John Milton*

BLYTHE ON DENTURES

A BETTER TITLE might be "blight on dentures" because, if Mr. Samuel G. Blythe of the august *Saturday Evening Post*¹ had his way, everyone would be terrorized when confronted with the denture experience. Mr. Blythe, apparently of the humor staff of the *Saturday Evening Post*, has written an article on dentures. His own recent experience plus a deep dip into the barrel of old denture jokes comprises his knowledge of the subject. All the old gags and hoary anecdotes are dragged out and paraded again.

Mr. Blythe, with his lilting humor, does one of those moss-covered, exaggerated personal experience stories describing his first encounter with a dentist. He calls a cavity "the Grand Canyon," describes a ten pound sledge used in the dental operation, pictures a muscular dentist "who used the cold-chisel-and-sledge-hammer technique." Just fine, soothing reading for children and nervous people in urgent need of dental treatment; the *Saturday Evening Post's* contribution to improving the nation's health.

You and I use the words "toothless" and "edentulous"; Mr. Blythe, though, is an etymologist as well as a humorist, he uses "agomphious," which is Greek, if you are interested, and means "without molars." The "agomphious millions" are described in this manner:

"Millions wear them [dentures]. Millions after each meal scrub them up. Millions boldly try to eat corn off the cob with them. Millions fail. Millions claim they can get along as well with them as they did with their real ones. Millions prevaricate. Millions have to paste them in. Millions are blessed with the long upper lip that conceals them, and thereby escape looking like a horse. Millions look like horses. Millions are better off than George Washington, for example, who had a set that must have been made for Bucephalus."¹

Somebody could write an *informative* article for the *Saturday Evening Post* (which probably wouldn't be accepted) on dentures and

¹Blythe, S. G.: Dentures, *Saturday Evening Post* 210:23 (March 26) 1938.

tell the true story. It might read something like this: Millions of people are edentulous and even their best friends do not know it, because a dentist has restored teeth and features artistically and naturally. Millions are edentulous and are thus rid of sources of infection that did endanger their lives. These millions wear dentures that function better, are more lifelike, and are longer in service than any other substitute for human tissue. Millions of dollars have been spent to make porcelain tooth shades and molds and denture bases more natural in appearance.

Humor has a place in the world. We need more of it, in fact. We dentists can have a little fun poked at us. We should laugh at ourselves. We need not get thin-skinned. Disease and disaster are not, however, subjects for humorous treatment. There are enough neuroses without creating others. To inculcate fears and fallacies is a vicious, anti-social practice. To tell people that dentures will destroy appearance, that they cannot be used satisfactorily, that they are seldom successful, is to implant fear in the minds of the millions of people who are faced with the denture experience. Every dentist can recall persons who contemplated dentures with terror, as a cataclysmic event in their lives. These people need help to alleviate their fears, because fear begets the thing that is feared. Apprehension, terror, dread, and a sense of futility and defeat can cancel out in a large measure the most scientific and precise treatment. Whoever believes that he cannot wear dentures erects a barrier that may be insurmountable to himself and to his dentist.

The *Saturday Evening Post* had an opportunity to tell the public about immediate and roofless dentures, about porcelain teeth individually stained and contoured to reproduce natural teeth, about the precision techniques that thousands of dentists use to create dentures.

We believe implicitly in the freedom of the press and of opinion. We believe also that the privilege of freedom carries with it a responsibility—a compelling responsibility for the improvement of the health and welfare of the nation: “to promote the general welfare.” The *Saturday Evening Post* with its enormous circulation and considerable influence had a chance to tell the important story of dentures to a public that is not well informed on an experience many of us one day may face. Instead the *Post* chose to be humorous—with disastrous results to the public and to us.

Edward J. Ryan

DEAR ORAL HYGIENE:

"I do not agree with anything you say, but I will fight to the death for your right to say it."—VOLTAIRE

Dental X-Ray Fees

TOO FEW X-RAY machines are paying their own way in dental offices. Considering original cost of the equipment and film processing apparatus, plus the cost of films and chemicals, plus the time of the dentist or his assistant in the dark room, probably fewer are delivering an adequate return than is the general belief.

One reason for this lies in the practice—far too general—of charging a flat fee of full-mouth dental roentgenograms. Usually this flat fee is far below a sum representing the charge for a single film multiplied by the total number of films used. While this differential is only reasonable, its influence is not sufficiently recognized by those adhering to the flat fee system.

Let us suppose patient A is a large man with a broad dental arch and no edentulous areas. A full-mouth set of dental roentgenograms will probably require 16 films for this patient. Patient B is a woman, whose mouth is under average, teeth small, and whose dental arch is narrow. Ten films may suffice for a complete x-ray examination of her mouth.

In the average office, patients A and B will pay the same fee for an x-ray examination. Obviously this fee will do an injustice either to one patient or to the dentist. A sliding scale, based upon the number of films used, the size and shape of the mouth,

the number of visible teeth, and the edentulous areas, is the obvious remedy for this injustice. Primarily, of course, the number of films will be the determining factor in the greatest number of cases.

Any sliding scale, however, must be based upon a schedule of diminishing costs. In every case, making the appointment, placing the patient in the dental chair, arranging the x-ray machine, spraying the patient's mouth with antiseptic, laundering of linen, and collection of the fee are basic factors. The time devoted to processing the films also has an irreducible minimum which should be calculated in the base fee.

Variations in the charge made for full-mouth dental roentgenograms, therefore, must come on a basis of estimated film and processing cost and time differential. Patient B may pay \$6.50 for her x-ray examination while Patient A will be charged \$8.00.

This application of dental economics, in effect since April, 1937, in my office, has resulted in a more regularly profitable use of x-ray equipment, and has proved satisfactory without exception to my patients. This diminishing scale, other factors being equal, starts at \$1.50 for the first film, \$1.00 for the second, and so on in diminishing added cost for each additional film.—HAROLD H. MURRAY, D.M.D., 710 General Insurance Building, Seattle, Washington.

FREE SPEECH IN MEDICINE*

TEMPERATE AS THE statement is which the committee of the 430 physicians published in The Journal of the American Medical Association to explain their relation to organized medicine, it will be read with mortification, perhaps with indignation, by thousands of physicians. In a widely quoted editorial published on Oct. 16, 1937, The Journal opposed any local, State or Federal grant for the improvement of medical education, the expansion of medical research and the alleviation of sickness among the needy, and, it is now charged, grossly misled physicists and the press to believe that the "principles and proposals" had been condemned by the American Medical Association as the entering wedge of socialized medicine, and that the 430 were in revolt. It turns out that the public press was more accurate and just than The Journal. Many newspapers published in "principles and proposals" in full; The Journal a mutilated version. Indeed, the representatives of the 430 remark that "on the whole the newspapers responded to the desires of the committee * * * with commendable restraint." Moreover, The Journal's declaration that there have been many defections from the ranks of the 430 is denied. Actually the new signatures voluntarily added to the "principles and proposals" far outnumber the few formal withdrawals. There is reason to believe that the total number of signatures is now well over 700.

The American Medical Association has earned the gratitude of the public by raising the standards of medical education and practice, passing new medicinal preparations and procedures, and exposing quacks. These praiseworthy activities should be extended to include the editorial policy of its Journal.

More important than the statement issued by the representative of the 430 is a promise, extracted apparently under pressure, that there will be henceforth "more discussion in The Journal of social and economic problems concerning the provision of medical care, with the presentation of various aspects of the subject." If a physician may now count within reason on the publication of his disagreement with The Journal's views—the 430 were choked off when any of them sought to explain why they believed in the "principles and proposals"—a notable victory has been won. For medicine is the one organized scientific profession that has never had the right to debate a social or economic issue in an official organ of its own creation.

*Editorial, reprinted with permission, from the New York Times.

Dentists in the NEWS

Bayonne (New Jersey) Times: The Surgeon General of the United States Army has just announced the promotion of Maurice Appel, D.M.D., 2814 Boulevard, Jersey City, from the rank of first lieutenant, held for twelve years, to captain in the Dental Reserve Corps of the United States Army.

Wichita Falls (Texas) Times: Out of graham crackers, zweibach, oatmeal, prunes and other foods that aid in building children's teeth, J. B. Hathorn, D.D.S., has, with the aid of a wooden framework, constructed a miniature house as a health exhibit. He plans to show his unique piece of architecture in all the grade schools of the city.

Clarksdale (Mississippi) Register: T. B. Birdson, D.D.S., is proudly displaying a one cent check from the comptroller of currency, the final dividend paid out by a local bank which closed several years ago, and has now made good on 85 per cent of its total deposits.

Attleboro (Massachusetts) Sun: Active in the interests of better local government and dentistry for thirty-two years, Justin L. McCarthy, D.D.S., an expert on baseball, a champion chess and checker player, has been appointed a deputy United States Marshall, and assigned to New Bedford.

Sinton (Texas) San Patricia County News: H. H. Weaver, D.D.S., has a license from the Federal Gov-

ernment as an amateur operator of radio station W5FZB, which he has assembled and reassembled until he can get excellent results. On a 10-meter band he now reaches Haiti, Porto Rico, the Canal Zone, South America, Hawaii, Canada, England, Australia, and the whole United States.

Providence (Rhode Island) Tribune: One of the five women dentists in Rhode Island, Marion Julia Cobb, Woonsocket, also licensed to practice in Massachusetts, has had her own dental office for fifteen years. She has established an excellent reputation as a children's dentist and recommends the dental profession to women who have patience.

Springfield (Ohio) News-Sun: Under the title "Choosing a Career," an article in this newspaper by Robert W. Seeger, D.D.S., President, Mad River Valley Dental Society, gives the historical background of dentistry, the requirements and curriculum in Ohio dental schools, and suggests important points to be considered by young persons considering a dental career.

Newark (New Jersey) Call: With the aid of some of the instruments and materials he uses in dentistry, Sol Rieman, a Montclair dentist, achieves delicate effects as a sculptor after hours. Although most of his models are cast in molds of bronze, he has made one replica of the human skull out of gold with a full set of 32 teeth.

Ask ORAL HYGIENE

Please communicate directly with the Department Editors, V. CLYDE SMEDLEY, D.D.S., and GEORGE R. WARNER, M.D., D.D.S., 1206 Republic Building, Denver, Colorado, enclosing postage for a personal reply. Material of general interest will be published each month.

Decalcified Enamel

Q.—I should appreciate your advice on the following case: The patient is a girl, 6½. Her upper centrals and lower centrals (permanent) are about one-half erupted, but without any pigment, about the color of white chalk. Her lower centrals are hard and covered with enamel; her upper teeth are not hard at all. With a sharp chisel I can shave off layers of what should be enamel. Her temporary teeth are perfectly sound, no restorations or decay, with a little pigment in them. The first molars have not erupted yet. Her brother, 12, has perfectly sound teeth, but without any color. The gums are healthy and the children's health appears to be good too. The father is a physician, head of a sanatorium here, a very capable man, and the children, I am sure, have been given proper food. The water they have always used is highly impregnated with sulphur. I have ordered a change in the water, a large amount of citrus juice, cooking oil, and a more careful attention to diet. I am more worried about the upper teeth than the lower ones as, without doubt, unless the texture of the teeth still to come is changed, and they are like the upper centrals, they cannot last long. Can you suggest anything?—L. A. S., Indiana.

A.—One naturally thinks of two conditions in relation to the teeth described in your letter: one a fluorosis, the other decalcifica-

tion. I find nothing else mentioned by Kronfeld.¹

In fluorosis we have in children the dead whiteness of enamel, which in later life may be discolored or may be both white and brown. This enamel is hard, as you describe these mandibular central incisors.

The maxillary incisors would seem to have decalcified enamel. I have had two such cases in infants. The incisor teeth were as white as chalk as soon as they could be seen and were soft. In each case the permanent teeth were normal as were the balance of the deciduous teeth.

There is nothing to be done now about the enamel, for of course it does not change after it is fully formed and the teeth erupted.

In the cases of infants I precipitated silver nitrate in the chalky enamel and kept the teeth comfortable and vital. This treatment would not do for your case unless the family were willing to put up with the appearance until time to make porcelain jacket crowns. However, it would be cruel to make a girl submit to the presence of black teeth until old

¹Kronfeld, Rudolf: Histopathology of the Teeth and Their Surrounding Structures, Philadelphia, Lea & Febiger.

enough to have porcelain jackets placed with safety.

I should be interested to see roentgenograms of these teeth, and it would be helpful in planning treatment to know the size and shape of the pulp chambers, and resistance to roentgen rays of the crowns and roots.—GEORGE R. WARNER.

Age For Permanent Bridge

Q.—I find it necessary to extract an upper central for a boy slightly more than 18. Is he old enough for a permanent three tooth bridge?—D. O. G., Minnesota.

A.—Ordinarily one would dislike to cut into the incisors of an eighteen year old person deeply enough to make secure bridge abutments.

It is our plan in such a case, and we have an exactly similar one for which we extracted a central incisor yesterday for a patient of 20, to make a simple vulcanite denture which we have the patient wear until the alveolar ridge has reformed, or longer if we think the adjoining teeth should not be prepared for a fixed bridge.

The determination as to when it is safe to make a fixed bridge is based on roentgenograms, showing position of pulps, age, health, and caries.

As to age: we like to wait until the patient is about 25. A strong vigorous individual is a better risk than an anemic, nervous one. There is more likely to be an unfavorable reaction in the pulp when a noncarious tooth is prepared for a bridge abutment than when there has been a moderate amount of decay, because the tooth has had time to build up a natural resistance and is not

so sensitive.—GEORGE R. WARNER.

Devitalizing Teeth

Q.—Through reading the ASK ORAL HYGIENE department, I am prompted to write for your comment or advice on the following case:

The patient is a man over 60, of low reserve and has a chronic heart lesion. He lives as quiet and normal a life as necessary.

Should teeth (molars) in need of heavy repair be devitalized; that is, rendered pulpless and canals filled with gutta percha, later to be crowned or provided with heavy inlays. Should such devitalized teeth be used for supporting dentures receiving great stresses? The patient does not demand artistry in appearance but rather wishes such treatment and restoration as is best for his future health.

If the molars are devitalized, can the root canals be thoroughly cleaned, sterilized, and filled in a manner that will ensure permanent absence of future infection at the apices? If so, is it a practical procedure, and can freedom from future trouble be guaranteed?

In the filling of the root canals should the apex or apices be punctured and the gutta percha driven through? Should any gutta percha be allowed to ride up over the structure and be left there?

Many New York dentists recommend devitalization and positively guarantee against future trouble for patients. This seems to me rather savoring of a negligent procedure in view of the fact that the teeth and oral sepsis are recognized by the medical fraternity as foci of infection in general health.—C. H. H., New York.

A.—1. Teeth should never be devitalized if they have a healthy pulp.

2. A vital tooth better supports heavy stresses than a non-vital tooth.

3. The success of root canal therapy is, generally speaking, in direct relation to the accessibility of the canals. Therefore, the success in treating molars is not as high as that of incisors.

4. No tooth can be devitalized and the root treated so that "permanent absence of infection can be insured." The greater accessibility of the root canal and the greater the skill with which it is treated, presumably the better the results.

5. The best root canal specialists believe it is safer to have the root canal filling one millimeter short of the dento-cemental junction than one millimeter beyond. The ideal result is just between these two.

6. No one can guarantee any definite result in root canal treatment and filling. The best dentists in the world have failures. The better dentists are not devitalizing healthy pulps but many are removing diseased pulps and treating and filling the canals if all conditions are favorable. But this should never be done without advising the patient of the possibility of such a tooth later being a source of infection.—
GEORGE R. WARNER.

Sensitive Restorations

Q.—A patient came to me today saying all her restorations were sensitive to ice cream. She is 23.

When she had her teeth straightened many restorations and gold inlays were needed. At the age of 17 orthodontia was finished and she weighed 120 pounds. Since then many cavities have begun to develop and she has lost 19 pounds. Her fingers and toes become numb at times.

Could the general condition and loss of weight be responsible for the sensitivity of a tooth after a restora-

tion has been placed in it? Will it be necessary to remove the restorations and put a protective under each one? —E. K., California.

A.—It seems to me that it is a perfectly natural, if not a normal, condition for metal filled teeth of a young person to be sensitive to the shock of ice. I have to protect my teeth from cold water or cold food and I am no longer young.

The numbness of which you speak merits a thorough investigation by physicians.—GEORGE R. WARNER.

Elongated Central

Q.—A physician, with whom I am associated in practice, recently called to my attention an interesting and, to me, a puzzling case.

A patient of his, a young woman in her second pregnancy, presented with one upper central incisor which is almost a full millimeter longer than the other central. This apparent elongation has taken place, according to her own testimony and that of her physician and dentist, during the five months she has been pregnant. Her teeth are in good condition and the occlusion is such that, in my opinion, it has no bearing on the condition. The amount of tooth structure exposed at the gingival area appears to be equal on both centrals.

The gums are in perfect condition and a dental radiogram shows normal investing tissue and no evidence of apical involvement. Although the picture fails to show much of the area above the apices of the roots, there is no evidence of a tumor or supernumerary tooth which may be responsible for the condition, and since the tooth itself is firm and is not in the least uncomfortable, I am inclined to doubt the existence of anything of this nature.

I have tried to find references to similar conditions in various text-

books but so far I have found nothing, nor have I had any satisfaction from any of my colleagues.

If this condition is due to some systemic disturbance or due to the natural acceleration of all growth processes during pregnancy, why is that one central affected?

Although the correction of the condition may be effected by simply grinding the incisal edge of the tooth, it is the reason for it that I am trying to discover. Any opinion or explanation will be greatly appreciated.—J. L. M., Illinois.

A.—Your thorough covering of this case leaves little for me to consider. However, if the case presented to me, I should make several roentgenographic exposures, one or two of which I should attempt to secure with the film so placed that the plane of the film and long axis of the tooth would be approximately parallel. This would give a clear undistorted depiction of the entire tooth and surrounding structures. Tests for vitality, mobility, and sensitivity to touch should be made, and you have made some of these. The color, form, and position of the gingiva should be and has been noted, and, I believe all these things are normal. A normal condition of the gingiva rules out the hypertrophy of the gingiva which often occurs in pregnancy and causes some changes in tooth position. It apparently is not due to a pericementitis, because of your negative findings.

I have searched the literature through the Index of Periodical Dental Literature and find nothing helpful. I have looked through Kronfeld's Histopathology of the Teeth and Their Surrounding Structures and have found nothing.

Now, there is always the possi-

bility that the patient and dentist are both mistaken about this extrusion, if it is extrusion, having taken place recently. We have all discovered things about teeth that the patient had never noticed and we have all failed to notice things until roentgenograms or plaster models were made.

It would be interesting and instructive to make good plaster models, and the roentgenograms I referred to, and see if time effects any change in this or adjoining teeth. I should appreciate further information about this case.—GEORGE R. WARNER.

Use of Iron Preparations

Q.—Please give me your opinion and advise as to procedure in following case:

My patient, a young woman 32, who has very good teeth, is under a physician's care. He advises me she is anemic and is giving her ferric ammonium citrate. He expects her to consume between 24 and 60 ounces. My advice to her was to take it through a straw.

What I would like to know is whether the iron could injure her teeth. The physician also told me he could give her the iron in capsule form but it is richer in liquid. Does it make any difference since the iron is consumed by the system, and would it have an indirect effect upon her teeth? It has been a long time since I have read of the effect iron has upon teeth.

The patient is usually cold, hypersensitive, and extremely nervous.—C. G. S., California.

A.—There should be no destructively injurious effect on the teeth of this patient through the administration orally of iron preparations. There may be some staining and it is for this reason that it is advisable for her to take iron

preparations through a straw. Using iron intravenously could have no possible deleterious effect on the teeth.—GEORGE R. WARNER.

Sterilization

Q.—As a regular reader of ORAL HYGIENE I have been greatly interested in your question and answer column. There is a question that I should like to have answered. Is the following an effective method of sterilizing gauze?—I place gauze in a water-tight container and place it in my water sterilizer and allow it to remain in the boiling water for at least an hour.—L. L., New York.

A.—So far as I know, you are the first one to think of sterilizing gauze in boiling water. It appealed to me as practical, but I have consulted authorities who say: "The temperature of boiling water 100°C (212°F) destroys all known bacteria in a few seconds. Spores of some organisms require boiling for a considerable length of time. Fractional sterilization is resorted to to destroy spore life."²

"Boiling water (100°C) is an efficient disinfectant, practically sterilizing within ten minutes all substances to which it has free access."

So it would seem that your plan is in reality as practical as I thought it was.—GEORGE R. WARNER.

Erosion of Gingiva

Q.—One of my patients, a girl 4½, shows erosion at the labial gingiva of almost all of her deciduous teeth as well as erosion at the mid-labial surface of three cuspids. I hesitate to restore them for fear of exposure. I have applied formalin to these eroded surfaces, and suggested applying milk of magnesia to surfaces

at night and the intake of dicalcium phosphate tablets.

The occlusal surfaces are relatively free of pit cavities with teeth tending toward white more than yellow. Her diet is good; she drinks plenty of milk; and has no childhood fever.

Would you suggest any other treatment and would you try to restore especially the larger eroded areas on the middle of the labial surface of the cuspids? This certainly would improve the appearance of these teeth.—T. P. D., Connecticut.

A.—You speak of erosion affecting the labio-cervical margins of a 4½ year old child. If this is true erosion, that is "a wasting away, leaving a smooth surface," it is the first case called to my attention in such a young child.

Kronfeld speaks of the type of erosion with which all practicing dentists are familiar—that is, the wedge-shaped grooves on the labial aspects of teeth of adults. He does not, however, mention erosion in deciduous teeth.

We have had a few cases of loss of enamel on the teeth of adults that was not of the typical grooves type of erosion mentioned here.

The ordinary erosion is thought to be due to the tooth brush, but naturally a 4½ year old child could not have caused erosion of its teeth with a tooth brush.

I have had two cases of white chalky enamel on the teeth of infants. In each case I treated them with silver nitrate and the teeth remained normal. In the last case the milk was activated with cod liver oil under the hypothesis that Vitamin D assists the system to accept or utilize calcium.

In erosion there is a tendency for the formation of secondary dentine under the eroded area. If

²Warbasse and Smyth: Surgical Treatment, W. B. Saunders & Co., 1:12, 1937.

this holds good in deciduous teeth you probably would do more harm cutting cavities and restoring the eroded areas than leaving them alone.

Doctor Price found an imbalance in the blood calcium in one of my cases of loss of enamel, but I don't know that the case you describe would come in that class. In fact I am at a loss to account for this case.—GEORGE R. WARNER.

Denture Dislodged

Q.—I have a patient, a woman 27, for whom I extracted teeth about ten months ago. Lately I have made both upper and lower dentures for her. The lower one fits perfectly. When I place the upper one in her mouth it seems solid. I cannot budge the dentures, but if she begins to talk or laugh the denture drops down. The woman is pregnant, three months. Could this have anything to do with the denture difficulty or could it be possible that from the time I take the impressions until I complete the denture, her gums could shrink? —L. U. M., Louisiana.

A.—The trouble with this upper denture is probably nothing more serious than an over extension of the buccal or labial border of the denture. Your description sounds to me as though the denture is dislodged by muscle pull during the functioning of the muscles in talking or laughing.

I do not think that the pregnancy or mouth change between time of impression making and insertion of the finished dentures could have anything to do with it.—V. C. SMEDLEY.

Sinusitis

Q.—My patient is a man, 33. His

health is excellent. He has intermittently for two years complained of the upper left molars feeling "numb" and "dead."

Recently this reoccurred and was accompanied by severe pain through the upper left maxilla and cheek area, not extending to the temple or eye. The patient had no head cold at the time. He indicated the upper left second bicuspid and last molar were sore during mastication. Restorations were removed with no relief.

His occlusion is heavy but normal; soft tissues, normal, healthy in appearance.

The pulp test shows the second bicuspid and the third molar one-third as responsive as the other teeth in the upper left jaw that are of comparable size and position. We have suspected sinusitis but never been able to prove its presence.

I would appreciate your assistance in diagnosing this case, since I have previously had two other similar cases of intermittent pain at rare intervals in this particular area.—J. A. C., New York.

A.—The case so well presented in your letter surely has many symptoms of the maxillary sinusitis which you suspect. It seems to me this should be ruled out by roentgenography and clinical examination. There might be polyps or a tumor in the sinus. In either case there would be the symptoms of a sinusitis, such as the pain you describe and the dental symptoms, but, naturally without drainage and not caused by a head cold. Polyps or tumors would be disclosed by good antro-posterior roentgenograms.

I can think of nothing else to account for the symptoms since you find the teeth normal.—GEORGE R. WARNER.



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Exasperated Wife: "The night before last you came home yesterday. Last night you came home today. If you come home this evening tomorrow night, I'm going straight home to mother!"

Backwoodsman (returning to his theatre seat after intermission): "Did I step on your toes as we went out?"

Seated Man (grimly): "You did, sir!"

Backwoodsman: "Here we are, Matilda. This is our place."

Sweet Young Thing: "Do you know what all the gossips are saying about me?"

The Boy Friend: "I sure do. That's why I'm here."

Junior (doing his home work): "Daddy, dear, what's dew?"

Daddy: "The rent, the note at the bank, and the car installment."

Annie May and Lulu Bell, colored, met on the street and Lulu Bell complained that she was hungry and had no clothes, and could not pay the rent.

Annie May: "Effen yo' ain't eatin' regular an' ain't got no clothes, how come yo' don't go down to de relief? They give yo' sumthin' when yo' is hungry."

Lulu Bell (looking interested): "Where am de relief?"

Annie May: "It's down at de city hall."

Lulu Bell: "Well, I don't know. I'se been givin' the Red Cross my trade, and I kinder hates to change."

Modern Youngster: "What are prayers, Mother dear?"

Mother: "Prayers, darling, are little messages to God."

Youngster: "Oh, and we send them at night to get the cheaper rate?"

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